SECTION 10(a)(1)(A) PERMIT FOR TAKES OF ENDANGERED/THREATENED SPECIES

Permit Number: 1300
Permit Type: Scientific Research/Enhancement
Expiration Date: December 31, 2007
Annual Period: January 1 through December 31
Annual Report Due: January 31 each year

Permit Holder:
U.S. Fish and Wildlife Service
911 N.E. 11th Ave
Portland, OR 97232

Contact:
David Carie
Phone: (509) 548-7573
Fax: (509) 548-5743

Authorization:
The U.S. Fish and Wildlife Service (USFWS)is hereby authorized to take endangered upper Columbia River (UCR) spring chinook salmon (Oncorhynchus tshawytscha) and endangered UCR steelhead (Oncorhynchus mykiss) for scientific research/enhancement purposes, as cited in the Permit Holder's application, subject to the provisions of Section 10(a)(1)(A) of the Endangered Species Act of 1973 (ESA) (16 U.S.C. §§ 1531-1543), the National Marine Fisheries Service (NOAA Fisheries) regulations governing ESA-listed species permits (50 CFR Parts 222-226), and the conditions hereinafter set forth.

Abstract:
USFWS is authorized an annual take of adult and juvenile, endangered, naturally produced and artificially propagated, UCR spring chinook salmon associated with a hatchery supplementation program for the Methow River populations of the species. The program is intended to supplement the species' naturally spawned production in the Methow River watershed. USFWS' program includes the collection of ESA-listed adults for broodstock, the use of artificial propagation in a hatchery environment, the rearing of artificially spawned progeny in the hatcheries, and the release of artificially propagated juveniles in the respective stream of origin. This program is operated in coordination with Washington Department of Fish And Wildlife's (WDFW) supplementation program in the Methow River Basin (Permit 1196). Incremental changes in production levels in response to adult escapement levels, predetermined means to manage stray fish, and two approaches for population separation are some strategies that USFWS will employ to minimize risks. All aspects of the program will be monitored in a manner that allows comparison of the effectiveness of alternative strategies.

USFWS operates three federal hatcheries within the Upper Columbia River Basin: Leavenworth, Entiat and Winthrop National Fish Hatcheries (NFH). These facilities rear non-listed spring chinook salmon to mitigate for impacts from the construction of Grand Coulee Dam and Basin

Project. Mitigation expenditures were authorized by the Grand Coulee Fish Maintenance Project, April 3, 1937. These facilities are currently operated by the USFWS and funded by the Bureau of Reclamation. The Winthrop NFH is located on the Methow River 72 km above the confluence with the Columbia River. The Winthrop NFH is phasing out the production of non-listed Carson-stock spring chinook salmon and is in transition to producing listed Methow River composite stock spring chinook salmon. Methow composite stock broodstock will be collected by WDFW at Wells Dam and at weirs on the Methow River and its tributaries, the Twisp and Chewuch Rivers (Permit 1196), and a proportion may be transferred to USFWS Winthrop NFH. Additional broodstock will be collected from volunteers to the Winthrop NFH, trapped at Foghorn Dam (mainstem Methow River at river km 74) and/or collected from Foghorn Ditch. Listed hatchery spring chinook salmon produced at Winthrop NFH may be released on-station or transferred to WDFW satellite facilities: Twisp Pond and Chewuch Pond.

Supplementation program activities will include:

- the collection of broodstock through USFWS trapping operations at Winthrop NFH, with potential collection at Foghorn Dam and Foghorn Ditch below Methow State Fish Hatchery (SFH);
- the holding and artificial spawning of adults collected by USFWS and a proportion of the adults collected from WDFW trapping operations at Wells Dam (with potential collection on the Twisp River, Chewuch River, at Foghorn Dam, and at Methow SFH)at the Winthrop NFH;
- the incubation and propagation from the fertilized egg through the smolt life stage at the Winthrop NFH;
- the transfer of a portion of the fingerlings and pre-smolts from Winthrop NFH for rearing in WDFW acclimation ponds on the Twisp, and Chewuch Rivers;
- the transfer of eggs for remote site incubation and/or the outplanting of fry into the Methow River Basin; and
- the release of smolts into the Methow River from Winthrop NFH.

This permit also authorizes USFWS annual incidental takes of ESA-listed species, including endangered UCR steelhead, associated with broodstock collection activities, hatchery operations, and juvenile fish releases from the program.

A. Take Descriptions and/or Levels

This permit is for work to be conducted over approximately a five-year period. Takes listed below are authorized per each calendar year during which this permit is valid.

Intentional Take

1. Adult and jack, endangered, UCR spring chinook salmon (both natural and hatchery origin) that return to Winthrop NFH, Foghorn Dam and/or Foghorn Ditch may be captured, anesthetized, and handled (enumerated, measured, sampled for tissues and/or scales). Tissue samples and/or scales may be transferred to WDFW's Scale Analysis Laboratory in Olympia or WDFW's

Genetic Stock Identification Laboratory in Olympia for archival storage and/or analysis.

2. USFWS may retain all adult and jack spring chinook salmon that return to Winthrop NFH, Foghorn Dam and/or Foghorn Ditch for use as broodstock in USFWS' supplementation program in the Methow River Basin.

3. USFWS may accept transfer of listed UCR adult and jack spring chinook collected by WDFW at Wells Dam, the Twisp River trap, the Chewuch River trap, Methow FH and Foghorn Dam for use as broodstock in USFWS' supplementation program in the Methow River Basin. Handling and authorization of any such transfer shall conform to all applicable conditions in this permit.

4. The annual production goal of 600,000 smolts at Winthrop NFH shall be used for the supplementation program until modifications at the fish hatchery are made. Production goals for USFWS' and WDFW's supplementation programs will determine broodstock collection activities by WDFW at Wells Dam and USFWS in the Methow River Basin.

5. The ESA-listed adult chinook salmon retained for broodstock by USFWS shall be retained at Winthrop NFH or transferred to transport vehicles and transported to WDFW's spawning facility.
6. The adult and jack, endangered, UCR spring chinook salmon not retained for broodstock must be released unharmed above the respective trapping facility for natural spawning immediately after being enumerated.

7. The ESA-listed adult fish retained for broodstock may be marked and/or tagged, treated with antibiotics, placed in holding ponds, and spawned. Sperm from ESA-listed adult males may be cryopreserved for potential future use. Carcasses of the ESA-listed fish spawned in captivity may be outplanted in the Methow River watershed for nutrient enrichment if disease protocols as determined by the fisheries co-managers are met.

8. The resulting eggs generated from the supplementation program may be incubated and the ESA-listed juvenile fish progeny may be reared in captivity. ESA-listed juvenile fish produced from USFWS' supplementation program may be tagged/marked with coded wire tags, passive integrated transponders, fin clips, and/or other biological identifiers.

9. Up to 600,000 juvenile, endangered, artificially propagated, UCR spring chinook salmon, progeny generated from USFWS' supplementation program may be transported from the hatchery and released into acclimation ponds on the Chewuch and Twisp rivers for subsequent volitional out-migration and/or released directly from Withrop NFH into the Methow River when they are ready to out-migrate.

10. ESA-listed juvenile fish within the hatchery environment may be monitored to acquire meristic and morphological information or sacrificed to obtain otoliths for future reference and/or to obtain pertinent pathological or physiological information. Indirect mortalities of adult ESA-listed fish associated with capturing, handling, and transporting activities must not exceed 5 percent of the total adult fish collected.

11. The progeny produced from the Winthrop NFH shall be released on-station or transferred to the Chewuch Pond as subyearlings for acclimation and release. The progeny of known Twisp River spring chinook salmon shall be acclimated and released from the Twisp Pond or on-station. A proportion (as determined by the fisheries co-managers) of the eggs/progeny from the Winthrop NFH may be transferred to the Methow Fish Hatchery for rearing and release.

12. The progeny produced from the Winthrop NFH may be used in remote site incubators or outplanted into the Methow River Basin as fry.

Incidental Take

13. Incidental take of ESA-listed UCR steelhead during USFWS' broodstock collection activities is authorized. During collection of spring chinook salmon broodstock at Winthrop NFH, USFWS may handle up to 20 listed steelhead. Listed steelhead are to be released into the Methow River unharmed. Lethal take of listed steelhead from these activities shall not exceed one adult annually.

14. Incidental takes of ESA-listed species associated with USFWS' broodstock collection activities, hatchery operations, and juvenile fish releases from the program are authorized. Because of the inherent biological attributes of aquatic species such as salmon and steelhead, the dimensions and variability of the Columbia and Snake River system and tributaries, and the operational complexities of hatchery actions, determining precise incidental take levels of ESA-listed species attributable to USFWS' hatchery activities are not possible at present. In the absence of quantitative estimates of incidental take, USFWS will provide fish release numbers/locations and other information on USFWS' hatchery operations to NOAA Fisheries to assure that incidental take is minimized to the extent necessary to protect ESA-listed species. If NOAA Fisheries determines that incidental takes due to USFWS' hatchery activities have the potential to jeopardize a of listed species, USFWS must suspend the activities that result in the incidental takes until a reasonable solution is achieved, this permit is amended, and/or USFWS' program is reevaluated under section 7 of the ESA.

B. Special Conditions

1. In cooperation with the Joint Fishery Parties and the Mid-Columbia Coordinating Committee, USFWS shall develop annual broodstock objectives and site-based

broodstock collection protocols for the UCR spring chinook salmon supplementation program. The annual broodstock objectives and protocols shall be submitted to the Hatcheries and Inland Fisheries Branch, NOAA Fisheries, by April 15 each year (see Operational Reports and Notification Requirement D.1.). NOAA Fisheries will provide a letter of approval, if it is determined that the annual broodstock objectives and protocols are consistent with the terms and conditions of this permit.

2. USFWS shall not release pure non-listed Carson-stock spring chinook salmon at Winthrop NFH after 2005.

3. USFWS shall collect adults at Foghorn Dam and Foghorn Ditch to meet the broodstock objectives and site-based broodstock collection protocols.

4. USFWS shall determine the origin (in-basin or out-of-basin; naturally produced or hatchery-produced (when possible)) of all spring chinook salmon retained prior to spawning, including noting numbers of fish of unknown origin. USFWS shall avoid using marked spring chinook salmon originating outside the Mid-Columbia River region for broodstock. Coded wire tags shall be read and the origin of each adult spawner shall be determined. The progeny of the adults captured at Wells Dam that are from the Entiat River or the Wenatchee River programs shall be transferred to their hatchery of origin if consistent with fish health guidelines.

5. After the adult fish are spawned, USFWS shall incinerate or bury all UCR spring chinook salmon carcasses if there is not a research, educational, or public outreach purpose identified, or distribute the carcasses in the Methow River watershed for stream fertilization purposes if disease protocols as determined by the fisheries co-managers are met.

6. USFWS shall report to the Hatcheries and Inland Fisheries Branch, NOAA Fisheries, annually on the number of adult, endangered, UCR spring chinook salmon collected and retained for broodstock and the details of the spawning procedures that were implemented. The report shall include a description of the origin (in-basin or out-of-basin; naturally produced or hatchery-produced (when possible)), as well as the proportion of males and females, of all spring chinook salmon used for artificial spawning. USFWS shall also provide detailed information (number, origin, sex, condition) on the adult fish released for natural spawning (see Reporting and Authorization Requirement C.1.).

7. Prior to any hatchery-produced juvenile fish releases and/or transfers, USFWS must receive approval from the Hatcheries and Inland Fisheries Branch, NOAA Fisheries, for the number, stock origin, release dates, and release location(s) of the fish to be released and/or transferred. A plan describing proposed fish releases or transfers, developed annually by the Joint Fishery Parties and the Mid-Columbia Coordinating Committee, must be submitted to NOAA Fisheries two months prior

to any such releases or transfers (see Operational Reports and Notification Requirement D.4.).

8. With the cooperation of WDFW, USFWS shall develop an identification method for each of the production groups in the Methow River Basin (Twisp River stock, Chewuch River stock, Methow River composite stock, Winthrop NFH Carson-stock spring chinook and others) to allow for the segregation of returning adults and evaluation of escapement and natural production (see Reporting and Authorization Requirement C.4.).

9. USFWS shall remove the captured fish from traps daily when the traps are operating. Those fish not retained for broodstock shall be passed upstream of the traps for natural spawning after enumeration and the collection of biological information.

10. USFWS shall determine the genotype, through in-situ scale pattern analysis and maturation timing, of late arriving adults to help ensure that ocean-type chinook salmon are not inadvertently included in the broodstock.

11. USFWS shall spawn both listed hatchery x natural and natural x natural crosses to the extent possible and evaluate the success of the two types of crosses. When possible, naturally produced fish retained for broodstock shall represent the natural-origin population in terms of age composition, sex ratio, and run timing (see Reporting and Authorization Requirement C.3.).

12. To the greatest extent possible, USFWS shall maintain known Twisp River spring chinook salmon as a separate broodstock within the hatchery. The progeny of known Twisp River spring chinook salmon shall be distinctly marked for identification purposes.

13. To minimize the lateral transfer of pathogens, a sterilized needle must be used for each individual injection when PIT-tagging ESA-listed fish.

14. All ESA-listed fish handled out-of-water for the purpose of recording biological information must be anesthetized. Anesthetized fish must be allowed to recover (e.g. in a recovery tank) before being released. Fish that are simply counted must remain in water but do not need to be anesthetized.

15. To reduce and control fish disease incidences USFWS will use the disease control procedures identified in the operations plans and adhere to the Washington Co-Manager, Pacific Northwest Fish Health Protection Committee and IHOT fish disease control policies.

C. Reporting and Annual Authorization Requirement

Contact: Hatcheries and Inland Fisheries Branch
525 NE Oregon Street, Suite 510
Portland, OR 97232-4169

(503) 736-4737
(503) 872-2737 (FAX)

For the duration of this permit, work in each succeeding year is contingent upon submission and written approval of a report on each preceding year's research/enhancement activities. Annual reports are due by January 31 each year.

The annual report must include:

1. a detailed description of activities conducted under this permit, including the total number of fish taken at each location, the number of ESA-listed fish taken at each location, the manner of take, and the dates/locations of take (see Special Conditions B.6.);

2. measures taken to minimize disturbances to ESA-listed fish and the effectiveness of these measures, the condition of ESA-listed fish taken and used for research/enhancement activities, a description of the effects of research/enhancement activities on the subject species, the disposition of ESA-listed fish in the event of mortality, and a brief narrative of the circumstances surrounding ESA-listed fish injuries or mortalities;

3. a detailed description of spawning activities (see Special Condition B.12.);

4. a detailed description of all marking/tagging used to segregate production groups (see Special Condition B.8.);

5. any problems that may have arisen during research/enhancement activities, and a statement as to whether or not the research/enhancement activities had any unforeseen effects;

6. a summary of all mortality patterns of ESA-listed fish in the hatchery;

7. any preliminary analyses of scientific research data;

8. steps that have been and will be taken to coordinate the research with that of other researchers;

9. the number and origin of all ESA listed fish provided from USFWS programs for educational, Tribal, or public outreach activities.

D. Operational Reports and Notification Requirements

Contact: Hatcheries and Inland Fisheries Branch
525 NE Oregon Street, Suite 51
Portland, OR 97232-4169

(503) 736-4737
(503) 872-2737 (FAX)

1. USFWS shall develop annual broodstock objectives and site-based broodstock collection protocols for the UCR spring chinook salmon supplementation program in the Methow River, in cooperation with the Joint Fishery Parties and the Mid-Columbia Coordinating Committee. The annual broodstock objectives and protocols shall be submitted to the Hatcheries and Inland Fisheries Branch, NOAA Fisheries, for approval by April 15 each year (see Special Condition B.1.).

2. Each year, prior to the conduct of research/enhancement activities, the Permit Holder must identify the personnel designated to act under the authority of this permit and confirm their experience through resumés or other evidence of their qualifications.

3. The Permit Holder must provide plans for future undefined projects and/or changes in sampling locations or research/enhancement protocols and obtain approval from NOAA Fisheries prior to implementation.

4. One month prior to any ESA-listed fish releases and/or transfers, USFWS must submit a plan describing the genetic origin/lineage, number, and destination of the fish to be released and/or transferred and receive approval from NOAA Fisheries (See Special Condition B.7.).

5. USFWS shall, at the first indication that annual production will exceed the 600,000 smolt goal for the Winthrop NFH, obtain written approval from the Hatcheries and Inland Fisheries Branch, NOAA Fisheries, to continue to rear and release fish in excess of the 600,000 production goal.

6. If an ESA-listed fish mortality event occurs at Winthrop NFH (>10 percent mortality in one event), USFWS must inform NOAA Fisheries of such event within two days. The Permit Holder must then submit a detailed written report.

7. The Permit Holder must report whenever the authorized level of take is exceeded, or if circumstances indicate that such an event is imminent. Notification should be made as soon as possible, but no later than two days after the authorized level of take is exceeded. The Permit Holder must then submit a detailed written report. Pending review of these circumstances, NOAA Fisheries may suspend

research/enhancement activities or amend this permit to allow research/enhancement activities to continue.

8. The Permit Holder must report the take of any ESA-listed species not included in this permit, when it is killed, injured, or collected during the course of research/enhancement activities. Notification should be made as soon as possible, but no later than two days after the unauthorized take. The Permit Holder must then submit a detailed written report. Pending review of these circumstances, NOAA Fisheries may suspend research/enhancement activities or amend this permit to allow research/enhancement activities to continue.

E. General Conditions

1. The Permit Holder must ensure that the ESA-listed species are taken only by the means, in the areas, and for the purposes set forth in the permit application, as limited by the terms and conditions in this permit.

2. The Permit Holder must ensure that all ESA-listed species are handled carefully. Should NOAA Fisheries determine that a procedure provided for under this permit is no longer acceptable, the Permit Holder must immediately cease such activity until NOAA Fisheries determines an acceptable substitute procedure.

3. The Permit Holder, in effecting the take authorized by this Permit, is considered to have accepted the terms and conditions of this permit and must be prepared to comply with the provisions of this permit, the applicable regulations, and the ESA.

4. The Permit Holder is responsible for the actions of any individual operating under the authority of this permit. Such actions include capturing, handling, releasing, transporting, maintaining, and caring for any ESA-listed species authorized to be taken by this permit.

5. The Permit Holder, personnel, or designated agent acting on the Permit Holder's behalf must possess a copy of this permit when conducting the activities for which a take of ESA-listed species or other exception to ESA prohibitions is authorized herein.

6. The Permit Holder may not transfer or assign this permit to any other person(s), as person is defined in Section 3(12) of the ESA. This permit ceases to be in force or effective if transferred or assigned to any other person without prior authorization from NOAA Fisheries.

7. The Permit Holder must obtain any other Federal, state, and local permits/authorizations necessary for the conduct of the activities provided for in this permit. In addition, before taking ESA-listed species in the territorial waters

of a foreign country, the Permit Holder must secure consent from, and comply with the appropriate laws of, that country.

8. Any personnel of the Permit Holder requiring Federal or state licenses to practice their profession must be duly licensed under the appropriate law.

9. The Permit Holder must coordinate with other co-managers and/or researchers to ensure that no unnecessary duplication and/or adverse cumulative effects occur as a result of the Permit Holder's activities.

10. The Permit Holder must allow any NOAA Fisheries employee(s) or any other person(s) designated by NOAA Fisheries, to accompany field personnel during the activities provided for in this permit. The Permit Holder must allow such person(s) to inspect the Permit Holder's records and facilities if such records and facilities pertain to ESA-listed species covered by this permit or NOAA Fisheries' responsibilities under the ESA.

11. Under the terms of the regulations, a violation of any of the terms and conditions of this permit will subject the Permit Holder, and/or any individual who is operating under the authority of this permit, to penalties as provided for in the ESA.

12. The Permit Holder is responsible for biological samples collected from ESA-listed species as long as they are useful for research purposes. The terms and conditions concerning any samples collected under this authorization remain in effect as long as the Permit Holder maintains authority and responsibility of the material taken. The Permit Holder may not transfer biological samples to anyone not listed in the application without obtaining prior written approval from NOAA Fisheries. Any such transfer will be subject to such conditions as NOAA Fisheries deems appropriate.

13. The Hatcheries and Inland Fisheries Branch, NOAA Fisheries, may amend the provisions of this permit after reasonable notice to the Permit Holder.

14. 50 CFR Section 222.23(d)(8) allows NOAA Fisheries to charge a reasonable fee to cover the costs of issuing permits under the ESA. The fee for this permit has been waived.

15. NOAA Fisheries may revoke this permit if the activities provided for by it are not carried out, if the activities are not carried out in accordance with the conditions of the permit and the purposes and requirements of the ESA, or if NOAA Fisheries otherwise determines that the findings made under section 10(d) of the ESA no longer hold.

16. Any falsification of annual reports or records pertaining to this permit is a violation of this permit.

17. The permit holder, in signing this permit, has accepted and will comply with the provisions of this permit, applicable regulations (50 CFR 222), and the ESA.

F. Penalties and Permit Sanctions

1. Any person who violates any provision of this permit is subject to civil and criminal penalties, permit sanctions, and forfeiture as authorized under the ESA and 15 CFR part 904 [Civil Procedures].

2. All permits are subject to suspension, revocation, modification, and denial in accordance with the provisions of subpart D [Permit Sanctions and Denials] of 15 CFR part 904.

D. Robert Lohn 8/16/02

D. Robert Lohn Date
Regional Administrator
Northwest Region

Daniel Diggs Date
Assistant Regional Director of Fisheries
Pacific Region
U.S. Fish and Wildlife Service